

"If war were declared to-morrow, what would we do for aircraft?"

AVIATION

MAY 14, 1923

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Part of the coast to coast flight: Lieut. O. G. Kelly waving good-bye from the cockpit of the Army Fokker.

Photo: White-Wade

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SPECIAL FEATURES

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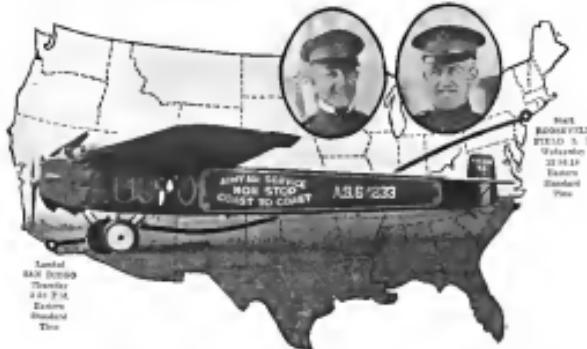


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CONTENTS

Editorials	523	Problems of the British Aircraft Industry	525
Army Flying Plan from Coast to Coast in 27 hr	524	M. Mitchell is new Board Treasurer	525
Cross Country Flight by Eight Planes	525	Landing Field in the Valley of Los Angeles	529
Silverside Passenger Plane	526	British and French Air Power	532
American War Triplane Under Design	527	Second Flying Officer Made	532
The New Aeromarine Flying Boat	528	Two British W. Type plane Questions	532
Large Scale of Army Aircraft	529	Eight Night Bombers	532
Aeronautic Patents	530	American Aircraft Engineers	532
Army and Navy Air Races	531	World's Distance Record	535
Curing Aeronautical Errors	535		

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AVIATION

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Mr. Collier Returns

WITH the return of Howard Coffin, President and general chairman of the National Aeronautic Association, it is believed that a aviation safety program will be resumed. Mr. Coffin, whose leadership and support since have made the Association possible but less so than attending the meeting of the International Chamber of Commerce. His return with great hope for a general improvement of the international situation should be noted.

He is now receiving reports regarding the work of the Association during his absence. The general impression prevails that extravagance, in criticism and party wrangling must be eliminated.

At Detroit a budget was prepared planning an expenditure of \$57,000 with the expectation of a membership of 10,000. As the membership at present is only about one thousand, and the offices exceeded the budget through the generosity of the president, the offices of the Association should be put in order now, so that others serving for the coming year will not feel that their service will require notably large personal donations.

The purposes and ideals of the founders of the N.A.A. are too much important to American aviation to have any question raised as to the character of the work accomplished.

Non-Stop from Coast to Coast

THE non-stop flight of Lieutenant Kelly and Macready from New York to San Diego will forever remain one of the milestones of aeronautical history. It was one of those achievements which could only be the result of careful preparation and by pilot skill and endurance. The Army Fokker and the Liberty engine which powered it have far added one more proof of their remarkable reliability. It was not a stroke of good fortune that caused this trip from coast to coast in 27 hr., it was the extreme merit of the machine and of the men who piloted it.

A very fair appraisal of this achievement was rendered in an editorial printed by the New York *Evening Post*, which read in part:

"The strain upon an engine lifting a weight of tons 2,700 and so enormous, but the greater stress was upon human nerves, pushing on through rain and sunshine, night and day, with every tissue on the skin, the muscles of eyes, ears, and mind never relaxing. The necessity of making repairs to the battery in water, the fight with adverse air currents, the complete loss of landmarks for hours at a time, all add to the dramatic quality of a flight carried through with wise

and skill presentation. The two Southerners take three places as an history with the American and British aviators who crossed the Atlantic and the Barns who helped the critics from London to Sydney."

"It is partly in the interest with man's previous achievement that the success of such exploits lies. Society had to refine its ideas of time and space when it found that steam could carry a boat from New York to Chicago in the time that a stagecoach took to cross from New York to Trenton. A few more sudden progressions are implied in taking our continent in a day's stride. While New Yorkers were going out for lunch the airplane was leaving the metropolis on the distance, when they sit down to dinner it was racing over the fields of Ohio, before we believed it was straightening out across Minnesota toward Kansas, and when we came down to breakfast it was already in New Mexico."

From the viewpoint of commercial air transport the coast to coast non-stop flight is worthy to be welcomed, for it has furnished a striking demonstration of the practical uses of the airplane for long distance travel.

Naval Aviation 201

AT Lakewood, N. J., is being completed one of the most interesting works of engineering in the country. To anyone visiting there, the first words for itself:

The ZR1 has been much criticized, perhaps as more than its due. It was an expensive undertaking, which neither time nor cost could undoubtedly be justified more reasonably by private contractors. Yet the latter should be correspondingly glad of the experience being accumulated by men who for the moment are able to generate costs at the interests of safety and precision.

Then there was the criticism that it was a mere copy of an obsolete German design. This has been largely refuted, due to the introduction of several original features which look like real improvements.

The correctness of the design was also questioned, particularly at the appointment of an unqualified committee. We were much surprised that it consisted but a single representative of the Aviation assault industry, we assume previously familiar with the details of seaplane construction. But we made the random qualification at the three-hundred and apparent standard with which the investigation was carried out and reported. If the operation of the ship is handled with as much care and good judgment, there seems every reason to expect good results.

In my event the first reaction that the ship is a test work of art in its line and all who have any interest in seaplanes are working at every possible success.

"If war were declared to-morrow what would we do for aircraft?"

LAWRENCE O'CONOR
Editor
VICTORIAN E. CLARK
EDWARD P. WARREN
RALPH H. DODD
CONTRIBUTING EDITORS

Army-Fokker Crosses Continent in 27 Hours

Lieuts. Kelly and Macready Fly Non-Stop from New York to San Diego at Speed of 93 1/2 m.p.h.

One of the most notable chapters of aeronautical history was written May 23, 1933, when the Army engined Army-Fokker T2 transoceanic monoplane piloted by Lieuts. George Kelly and John A. Macready, A.S.A., flew from New York to San Diego in a nonstop flight of 20 hr. 30 min. The course flown was New York-Syracuse-Buffalo-Cleveland-Chicago-Minneapolis-St. Paul-Salt Lake City-San Diego, a distance of 3000 miles the distance covered by the same pilots in their previous attempt to cross the continent, last November, when they flew from New York to Los Angeles. Capt. John Adams, and Capt. Arthur W. Hause, E.E.C., two former fighter pilots of the 28th Pursuit, N. Y., to Children, England, in July 1932, covered a distance of approximately 1800 miles over the Atlantic.

The Route Planned

Lieutenants Kelly and Macready arrived with the T2 at McCook Field, Massena, L. I., on April 28, coming via Worcester, D. C., from McCook Field, where only ten days before

"We began to pass the Roosevelt Dunes by moonlight and reached the beginning of the Rockies by dawn, so have daylight for part at the trip, and left San Diego in the evening. We will follow a great circle route."

"We will wait for the wind to shift and be with us, but we will fly as much as possible. The distance between Salt Lake City and San Diego is 1300 miles, so flying the distance in 20 hours would be the equivalent of running the 100 yards in a day or two, will give us the right wind."

"The Rockies where we will cross have a maximum altitude of 8000 ft."

In the plan, weather forecasts indicated that the desired "route" had been cleared over Rockies they had at the time "now" was reported forming on the Mexican border. The weather conditions appeared ideal for the attempt and preparations were instantly made to take off the next day. As McCook Field was too small to permit the heavily loaded ship to take off, the Fokker was flown over to Roosevelt Field as "light" condition and twice landed up with the huge fuel



Photo: WPA Studio

First view of the Army-Fokker monoplane T2 as which Lieuts. Kelly and Macready left nonstop from New York to San Diego on May 23, 1933.

that had established the new 30 hr. world duration record. The long distance and previous low altitude record will be efforts of the Engineering Division of the Air Service and will stand in perfect condition for the great flight from ocean to ocean.

Their plans were dependent upon an eastern wind, an Lieutenant Macready stated, in an interview, a week ago. The two experts, however, after a close examination of the situation, as it shows how closely the two fliers adhered to the route they had mapped out beforehand.

"We are just waiting for the weather now," Lieutenant Macready said. "We tell all the winds are likely at the season to blow from the east, but, now, our winds are very weak and erratic. We failed to get our first flight started last November because of a cracked water-pump, which brought us down near Indianapolis. This time we are starting free of the East because our machine will be lighter, as a result of gas and consumption, when we reach the Rockies. The greatest altitude we will have to make

"The T2 has an 80 ft. wing span and weighs loaded, 36,000

lb. Her maximum altitude is 12,000 ft., but, high, she will go to 14,000 ft. The Engineering Bureau changed her model to prevent carrying too gas. We will start with 25 gal. We will carry 10 gal. of gasoline in each tank, leaving a reserve holding capacity for Roosevelt, Roosevelt, New Mexico, passing over Dayton, south of Indianapolis, past north of St. Louis, south of Wichita, Kan., thence to Tucson, over Phoenix and south of Yuma, Ariz.

Reports of an progressive westward come into New York at fairly regular intervals. McCook Field reported that the ship had passed on board at 6:50 p. m. dropping a message to the

airfield that the ship expected to be in San Diego by noon the following day. St. Louis sighted the Army-Fokker at 10:15 p. m., and Atchison, Kan., reported the passage of "a powerful airplane believed to be the T2" at 11:30 p. m. Thus after a long night's flight across State, Mo., it was reported that the ship had crossed the Missouri River at 10:15 p. m. May 24, 1933. When El Centro, Calif., sighted the T2 at 11:35 Pacific Time (7:30 p. m. in H. S. T.), it was only 238 miles from its goal. An hour later New York learned that the Army-Fokker had landed at Roosevelt, N. M., at 12:20 p. m. "Pete" Tamm (41, 6' 5 1/2", 180 lb.) and his co-pilot, Lt. Frank J. H. Berg, Jr., arrived in Roosevelt at 1:15 p. m. from McCook Field. At the distance between this field and Roosevelt Field is estimated at approximately 3000 miles, so it will be seen that Lieutenant Kelly and Macready maintained throughout the flight an average speed of about 80 m.p.h.

The Impossible Has Happened!"

The arrival of the two fliers at San Diego was anticipated. More than 100,000 spectators gathered on the airfield for the big spectacle, and when it happened it was created with cheer and elation at every street and whistle on every porch until in the harbor and on forebays. Army and Navy planes circled the airfield and over Roosevelt, where Mrs. Henry H. Arnold, commanding officer of the base, greeted them with the announcement: "This regulation has been kept!" Lieutenant Macready was the first to step out of the ship, for Lieutenant Macready was at the controls when the T2 landed. Their first request was for cigarettes, their rapidly having gone out in flight.

After having received the congratulations and cheers of the crowd of officers, civilians and civilians who had gathered on the airfield to witness the record-breaking flight, the two aviators, after a short pause, took up their cameras for motion picture operation, the two pilots were taken to field headquarters. There they were examined by the flight surgeon on the field, who pronounced both men in excellent physical condition. In the evening a dinner was tendered the two fliers by the Roosevelt Legion.

Story of the Great Plane

Lieut. Kelly and Macready had refreshed themselves with a drink with some local folk, told their story. It was a compact story, fast one packing in a sentence or two and first the other landing.

"When we left New York," said Kelly, "we could not even get into the cockpit out of the 100 degree sun. We had to wait three hours and an additional hour and a half to

"Over New Jersey, the voltage regulator went out. This was heartbreaking, for, unless, we could repair it in flight we would be forced to land here. While I handled the control wheel Macready set desperately to work taking off the switch plate.

"He succeeded and a load was lifted from our hearts when the regulator began to function properly."

Macready took up the story:

"From that moment the flight became a pleasant prospect for us, and we concentrated. Just about the time the regulator was repaired we approached at 90 per cent of the full horsepower when we had passed the New Jersey coast.

"Knowing Davies, Okla., 580 miles away from New York, we headed for St. Louis, where stayed for Roosevelt, N. M. We took off again at an altitude of 12,000 ft. when darkness came on. We were flying along directly over the mountains from Denver, Colo., we were startled by the sight of a large flock of light projecting up through the clouds. It was a remarkable scene along a rocky and desolate shore to us, for otherwise intense darkness prevailed and we were traveling solely to our compass to bring us a straight course.

"Indeed, a load of light which we knew came from Colorado, we realized straight to us across the Missouri River. A light map began to fall when we crossed the Missouri long, a condition we were prepared for in account of the cloudy weather in Indiana and Illinois. At the Missour-

"The aircraft flew for the entire 24 hr. in space, disconnected from all power and radio power which was normal in the rest of a flight at field—

Kansas line, while travelling faster than 100 m.p.h. and at an altitude of 8000 ft. we sighted moonlight filtering through cloud layers. It gave us a feeling of security."

"These faint rays of moonlight were all that we enjoyed in the location until daybreak when we saw the rising sun. Mrs. Henry H. Arnold, commanding officer of Roosevelt, N. M., was present at the landing. After the two fliers had landed, he said to the two fliers, "What made you do it?" Macready, in reply, said, "We were on our way to see what was on the horizon on the outskirts of Tucson, Ariz. It was a hardknock we knew."

The landmarks showed the fliers that they had travelled far enough to take them to the north, so far, carrying a fraction of a mile from the airfield. They had to wait for a strong gale wind that would force a tendency to make the plane drift from its course. It was a marvel of navigation.

Crossing the New Mexico line, the plane headed for Santa Rosa and the Rio Grande River in New Mexico was crossed at 12:20 p. m.

"From that moment until we passed Phoenix, Ariz., we did not sight a single, solitary human being," observed Macready.



Lieuts. Macready (left) and Kelly exchange last-minute impressions before the great flight of 3000 miles from New York to San Diego.

"We flew over almost dry lakes, vast salt marshes and over the desert floor, where the temperature has both end over end of four distinct seasons."

Trouble with the air lines was experienced over the unusual forest of Southwestern Arizona, according to the fliers. "We had to do some emergency stops and Kelly Macready was forced to leave his goggles and don his regular goggles, and over patches to find an altitude through which we could head over Phoenix. A problem over a severe headwind was found and the want of the trip was over."

The fliers alternated positions every six hours and as usual in New Mexico flights, Kelly, who was then Macready's "navigator" due to the fact that he was pilot, never slept during the last hours of the flight.

Complaints

Among the numerous messages of congratulation which Macready and Macready had then were telegrams from President Harding, General Pershing and General Patrick.

The President's message read:

"Aboard my most recent congratulation on the success of your record making non-stop trip east to west, flight successfully completed. Your flight creates a new chapter in the history of American aviation."

General Patrick's message read:

"We have been following your great flight. The Army is proud of your splendid achievement. Please accept my official and personal greetings and congratulations."

The President's message was read by General Patrick, Chief of Staff, and Macready and Macready responded.

"I extend to you most hearty congratulations upon your successful completion of world's record nonstop flight from New York to San Diego. This flight is viewed with pride by all Air Service officers and brings to this country increased prestige in the world of aviation. It is the first of a

"If you were declared necessary what would we do for aircraft?"

"If you were declared necessary what would we do for aircraft?"

Problems of the British Aircraft Industry

An Article by C. G. Grey Shows that American Manufacturers are not Alone in Difficulties

In the April 21, 1932, issue of *The Aeroplane* there appears under the signature of its editor, C. G. Grey, an article which gives an interesting view of the trouble the British aircraft manufacturers experience in the struggle with an officials of their government. A copy of this article comes with the following note from Mr. Grey's editor:

"It is particularly interesting in view of the feeling in England against government subsidies of aircraft. Much of the same atmosphere is found here with regard to the contributions were due at the Royal Aircraft Factory, minister with the fleet of the year, of the new Air Ministry at Farnborough.

Mr. Grey's article is written in that characteristic manner which gives it his copyright a distinct personal touch.

For a number of years, no man and no woman, no man or woman from ports of the British Isles, down to the officer of the Royal Air Force have presented the debate but the efforts of our Air Service and consequently the safety of the British Empire depends ultimately on the existence of a strong, efficient and firmly established Aircraft Industry capable of supplying to our aviators the best aircraft in the world.

The discussion from this direction in the past was a few Army officers and a number of employes under the War Office who agreed with the late Sir David Henderson, then in control of Military Aeronautics, and with Colman Smyth, then Under-Secretary for War, that the right way to maintain our war power was to equip the Royal Flying Corps with modern aircraft. They also agreed that the best way to considerately win over men to good is to be "the best known" at the Royal Aircraft Factory at Farnborough. The discussion today appears to be one or two Labor Members of Parliament who because of their antagonism to Communists, tend to think that one of these anti-social elements has been instrumental in every way they should not be allowed to make weapons of war. That the manufacture of such weapons to our enemies should again be relegated to the Royal Aircraft Factory now reassures the Royal Aircraft Establishment.

Standard Aircraft

The failure in the belief of the early discussions was disclosed early in the War when at the end of 1925 and early in 1926 our premises standardized. All airplanes were shot down by the class by German pilots on the highly individual products of our old friend Major-General Astor Fletcher. But fresh winds provided according to his belief and the Finance Committee of the Royal Air Force, of £1,000,000 of the total power of the Royal Aircraft Factory, given with the result that the doctrine of the Ministry for a Strong Aircraft Industry was accepted officially.

Everybody in the Royal Air Force and in the Air Ministry today who had any experience of war flying believe firmly that we can only get the best machines and engines and other equipment by giving the Royal Aircraft Factory free hand to do what it can do best for the war flying. They know that the way to get the best is to let the Royal Aircraft Factory do what it does best. The Trade and the Navy say simply that they want an engine of such and such weight and horsepower to fit into such and such dimensions, or that they want an airplane to carry such and such a load at such and such a speed for such and such a

distance, and that in due time they will get it. And they know that the Royal Aircraft Factory (or Establishment) has been experimenting for three or four years at a cost of many millions of pounds and has produced probably evidence of any real value to aeronautical progress, though not always in a form which gives a lot of satisfaction and interest. Some of the more interesting and some rather interesting facts which have confirmed other people's ideas if they have not actually proved the way turned a new epoch in aviation.

Therefore on the whole it may be taken that the doctrine of the Ministry for a Strong Aircraft Industry is fully understood and that consequently the point of view of the Royal Aircraft Factory is that the best way to maintain our war power lies, not only in the Air Ministry but in the political status which ultimately governs the fate of Ministers.

There are three questions which are at present causing the minds of the Royal Aircraft Trade. First there is the matter of the relation of the Royal Air Force to the Navy. Secondly there is the matter of Supply and Research. And thirdly there is the matter of Civil Aviation. One proposal to deal with these is first order.

The Navy Problem

When one comes to consider the attitude of the Trade to the much-voiced question of whether the Navy should have aircraft, one finds that there is a variety of views—some strong, others weak, and others moderate. However, the early days of the War 1914-18 have left in the minds of many people in the Trade a distinct affection for the Navy. They recall the days to which one was always referred when the Royal Aircraft Factory gang was trying to evict the Trade and to maintain the Royal Flying Corps. They also recall the days of the consequent credit, loans and promises to the Air Department at the Admiralty under Commander-in-Chief, Mawson, R.N.—now, also, a mere EP—assisted by a little group of eleven who successfully contrived Naval Officers like the Duke above.

The War Office ordered standardized airplanes which were delivered in a number of different types. The Admiralty bought all sorts of plane models, Wrights and so on, and looked like putting up a better performance than those which already existed. Most of them were on active service before even these drawings were completed—let alone waiting till their production was standardized.

For every type of aircraft required by Government and the Royal Air Force's department about a dozen possibly experimental designs were built, for the department excluded among its other members some of the most sensible, assuming and viewing them from whom one has ever had the joy of meeting. At the end of time of the R.A.F. about the "Sea 1,000" was the largest and the best aircraft ever made and manufactured which will be forgotten. But the facts remain that the Navy kept the Trade alive and that the Navy was responsible for all aeronautical progress up to 1926.

Also the Navy's dash-and-individual and wonderful but effective methods made it much easier for the young and inexperienced but brilliant clever people in the Aircraft Trade to deal with the Navy than with the Army and its controllers and the Royal Flying Corps and its controllers. It was only when the little one-man-shows who had airplanes in their crew grip van fortunes with out-drills and roller-skates and shooting-clerks and confectionaries and whatnot that the proprietors began to see the necessity for War Office forms in discomfiting (or whatever may be the

right word for turnabout-time) and began to see the middle which arose from the Navy's habit of giving orders under the heads of bullet-heads combination of which generally included "turnabout" and "discomfiting."

On the whole therefore it is not very surprising that a good many people in the Trade have a certain fondness toward the Navy and are not shortly inclined that a Naval Air Service would be a bad thing. This is a point which the Air Ministry would do well to consider especially in relation to the designs of its little sub-departmental designs with people like Mr. T. E. Lawrence.

One naturally draws attention to the way in which people in the sub-departments as the technical people—without any real experience of design or construction—seek to impose their will on men in the Trade who do know how things ought to be done. At these petty officials in the past and present have tried to alienate the affection of the Trade from the Navy by giving it a bias in favor of the free and easy Naval methods.

Moreover the Trade (or some of it) is by no means sure that the Air Ministry is going to come out on top in its fight with the Admiralty and so there is a tendency in some quarters to make friends with the Masters of Unscrupulousness just as is the Admiralty with. There is quite a number of us who feel that the Admiralty is right and the Trade is wrong. The Trade today shows very clearly to the Admiralty the Trade was made fit without Admiralty orders owing to the Navy adapting a dog-karid policy and building its own machines at Filton or Farnborough.

If that happened it would of course result in all the Navy getting a lot of very bad machines at great cost in the long run. The Trade would be compelled to buy inferior and sharper machines just as the free firms on the Tyne and the Clyde and at Barrow build better and sharper machines than are built on the docksides at Chatham or Portsmouth or Devonport at such low expense and with such long delay. But in the instance the Trade would raise these orders and will not be able to do so.

Todays with a little document of Supply and Research it takes not longer to get a good one size selected for though the owner of the size may start it along several routes—either through the Army Forces branch or the Services branch or the Inspectorate branch or the Civil Aviation branch or the Political branch or the Finance branch—it always comes to the Royal Aircraft Establishment which is the central point concerned with that species of material. And if there are losses to be a find or a loss in that sub-department—which it is by no means unlikely—the firm gets no further.

Supply and Research

We may now turn our attention to the question of Supply and Research, which as the reader will see will affect the manager is closely allied to a quite popularized notion as the Admiralty's war with the Air Ministry.

The first grievance which one meets almost everywhere throughout the Trade is the interference of the party officials at the Air Ministry and/or the Air Ministry and at Farnborough. The majority of the Trade is not in favor of this situation. It is of course true that certain types of airplane or engine or project has long been adopted as standard for the R.A.F. but the Air Ministry officials should check the order books and analyze the materials and do everything more with regard to the basic quality of the finished article. And it is absolutely necessary that the Air Ministry officials should be responsible for that design should be held dear by competent officials with warlike expense. But it is merely a nonsense when a whole bunch of gods—without either experience or education (in the wider sense of the word)—are let loose to upset the designs of a better man.

Mr. T. E. Lawrence, the famous Arab, said: "If we want a machine for (say) bombing, to carry such a load such a distance at such a speed and to carry such a crew and armament and such gadgets for navigating and signaling. Now let me see what you can design." If we approve we will order

samples," then all would be well. That is in fancy words or less what is done. But in practice first sub-departmental bolts in and then another, the process is simply paraded around the room until the design is finally accepted—after various experiments, probably, another week a decision is made of a most awkward type, another week on steel of a certain dimension in certain places (and obviously passes unsatisfactorily through all a very long period), another week a decision is made of another dimension, short, and another month we shall take where we like would do better. And so forth and so on until a dear experimental machine need a load of concrete just for all the little half-baked fancies out of the sub-departments' imagination.

What we are in fact get for our aeronautical progress of the whole of the Technical Department was wiped out and of the production of new machines was left to a Finance branch aero-engineers, pilot and aircraft contractors with the Admiralty. Inspectorate Department as a sort of sponge to soak up the idea that the Trade had, and the Trade today shows very clearly to the Admiralty the Trade was made fit without Admiralty orders owing to the Navy adapting a dog-karid policy and building its own machines at Filton or Farnborough.

The trade—for the benefit of those in High Places at the Air Ministry—is that the Trade is fed to the teeth with all the production of new machines and the Trade is not in a position to have a mouthful to eat. The Trade is not in a position to have a mouthful to eat when it is safe to fly and the contractor on the other hand being allowed to make a fortune which it was possible to mention in a commercial proposition. The trade—for the benefit of those in High Places at the Air Ministry—is that the Trade is fed to the teeth with all the production of new machines and the Trade is not in a position to have a mouthful to eat when it is safe to fly and the contractor still hold their jobs, the firms which object would suffer from regrants of the free available opportunity. What would not suffice but for the fact that we are condemned to the single line of supply.

R.A.F. Policy

The Trade's other great grievance on the Supply and Research side is the Royal Aircraft Establishment. Last year it消耗 something like £750,000. This year it is cut down to something less than £600,000. But what has it to show for its saving in say 1932? I am afraid that it is not manufacturing samples and that it is not "producing" in competition with the Trade. Very good, but what is it doing in purely technical?

Surely it exists for purposes of research and research. Possibly if a firm needs a wing or tailplane or fuselage or a fin or a rudder or a propeller or a motor or whatever it is in the course of a business to prove the feasibility of something. But as has not been of any recent years the R.A.E. has distributed to the Trade to help general progress. Some small firms which employ former attachés of the R.A.E. will get the results of tests moderately as remarkable these. But such results as have been obtained by the R.A.E. have been of little value to the engineers whose main departing point before either becomes the actual object of the experiments had become obsolete or before the Trade itself had done all the experiments and the results become known before the R.A.E. had got half-way.

Some of our friends in the Trade have argued that they have received very interesting information from the R.A.E. Very possibly so. But it is not what the rest of the Trade has received been worth £750,000! That is the real point.

M. Mitchell Is New Bosch Treasurer

Norman Mitchell was elected President of the American Bosch Magnetic Corp. at the December meeting in New York April 3.

Mr. Mitchell was born in Providence, R. I., and received his early education in the private schools of Boston and the Massachusetts Institute of Technology. His first business position was with the Stone & Webster Co., Boston, from a young and small electrical engineering firm.

In 1898 he entered the employ of the Illinois Steel Company at Chicago, and took part in the early experiments in

"If we were declared war-war what would we do for aircraft?"

228

"If we were declared war-war what would we do for aircraft?"

making money from silent picture dog. These resulted later in the organization of the famous Universal Pictures Company, a very large and powerful corporation. Mr. McDonald remained with this company for twenty years as Assistant to the President. He was instrumental in forming the Post-Card Concert Association, and his services were chosen by the Post-Card Publishers' Committee of the Association. In 1920 Mr. McDonald came to Los Angeles to become Vice-President and later President of the International Steel Corp., a subsidiary of the American International Corp., engaged at exporting steel and steel products.

Upon the collapse of our foreign trade in 1921, the American

International Corporation withdrew from the steel business, and after a successful separation of his company Mr. McDonald formed the International Steel Company of New York, going to South America as a financial advisor for this bank in 1922.

Mr. McDonald's predecessor, George A. MacDonald, is President of the Citizens National Bank of Springfield, Mass., and his son, George, would be a valuable man for him to give additional tact to the Bank Corp. However, Mr. MacDonald still retains office as a Vice-President.

Mr. McDonald's rather broad experience will make him a valuable acquisition to the Bank still.

Landing Fields in Vicinity of Los Angeles

By Dr. Ford A. Carpenter

Air journals are becoming more and more common in Los Angeles and for their use the following maps of landing fields in this vicinity has been prepared. We have also prepared for their use a table showing the index number of each of the eleven airports, names, present legal location, altitude above sea level, the size of the field in acres, the shape, dimensions of landing strips, runway length, the runway and landing strip types, and other pertinent information. The name of the owner or lessee is also shown in the table.

This table also shows the legal and character of concession, airline telephone, telegraph, radio, etc., the proximity of stores of food, water and repair shops, as well as proximity of the airfield to lines of ground transportation of major importance, such as, the stage, dimension of roads, railroads, etc. The reader will find the name of the owner or lessor in the chart in the table.



Map showing location of landing fields in the vicinity of Los Angeles, Calif.

"If war were declared to-morrow what would we do for aircraft?"

CHARACTERISTICS OF AIRPORTS IN VICINITY OF LOS ANGELES, CALIF.

Proposed by Department of Meteorology & Aeronautics, Los Angeles Chamber of Commerce, April 15, 1923

No.	Actual Name	Normal Command	Lat and Long	Altitude above sea level	Dimensions of the field	Runways and offices	Size and shape	Site of shops	Shelter	Emergency shelters
1	VALLEY FLYING LEAF FIELD	Angeles Calif.	34° 10' N 118° 10' W	Sea Level	40 miles square	Runway	Runway	Runway	Runway	Runway
2	BRAND FIELDS	Glendale Calif.	34° 11' N 118° 11' W	300	8 miles square	2200 ft S E	10 acres	Runway Runway	Runway	Runway
3	VALLEY ROUTE FIELD	Los Angeles Calif. Runway Field	34° 11' N 118° 11' W	Sea Level	10 miles square	Runway	Runway	Runway	Runway	Runway
4	CHURCHILL FIELD	Santa Monica Calif.	34° 11' N 118° 10' W	300	17 miles square	1000 ft S E	110 A.	Runway	Runway	Runway
5	DALMERTON	Long Beach Calif.	33° 45' N 118° 12' W	80	10 miles square	1000 ft S W	110 A. S W	Runway Runway	Runway	Runway
6	CARLTON FIELD	Gleneden Calif.	34° 07' N 118° 07' W	300	8 miles square	1000 ft S W	1000 ft S E	Runway	Runway	Runway
7	KIRKWOOD AIRPORT	Hollywood Park Calif.	34° 07' N 118° 07' W	300	8 miles square	1000 ft S W	1000 ft S E	Runway	Runway	Runway
8	ROSEMEAD AIRPORT	Los Angeles Calif.	34° 08' N 118° 08' W	300	8 miles square	1000 ft S W	1000 ft S E	Runway	Runway	Runway
9	BONITA FIELD	Arvinia Calif.	34° 09' N 118° 09' W	400	10 miles square	1000 ft S W	1000 ft S E	Runway	Runway	Runway
10	SEAGATE TERMINAL	S. A. Parker Calif.	34° 09' N 118° 10' W	Sea Level	10 miles square	Runway	Runway	Runway	Runway	Runway
11	VALLEY PRINCIPAL FIELD	Torrey Calif.	34° 10' N 118° 10' W	8	14 miles square	8000 ft S W	1100 ft S E	Runway Runway Runway Runway	Runway Runway Runway Runway	Runway Runway Runway Runway
12	Experiments	Shelters	Wind dir.	Characteristics	Supply	Present in operation	Present in construction	Present in planned	Present in use	Present in use
1	Three ex "A" runways	True to horizon for small aircraft	NW	Tele- Phone Radio Power	Gas, oil, light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Pacific Marine Airlines Co.
2	Circle of runways	True to horizon for small aircraft	SW	Tele- Phone Radio Power	Gas, oil, light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	L. C. Ward
3	Top Runway W. end 1000 feet	True to approx horizontal	SW	Tele- Phone Radio Power	Gas, oil, light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Pacific Marine Airlines Co.
4	Orion J. Gardner Field No. 3 runway	Path of elevation on one side	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Learned L. C. Ward through the Tele. Co.
5	"V" Runway E. end 1000 feet	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	East R. Aerodrome
6	"Z" Runway S. end 1000 feet	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	City of Glendale
7	Circle 4 runways E. end 1000 feet	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Greater Airports of Southern California
8	—	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Greater Air Shores
9	Circle 4 runways E. end 1000 feet	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Greater Air Shores
10	Circle 4 runways E. end 1000 feet	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Greater Air Shores
11	Orion J. run- ways	True to approximate horizontal	NW	Tele- Phone Radio Power	Gas, oil light repairs	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Runway Runway Runway	Greater Air Shores

"If war were declared to-morrow what would we do for aircraft?"

British and French Air Power

The strength of the British Air Force was the subject of considerable debate recently in the British Parliament. Lord Col. Sir Ernest Huggins, Inst., D.S.O., Secretary of State for Air, has submitted his estimate for the Air Force for the next fiscal year, giving figures after the manner of the American War Department's budget. The figures were:

He stated that at the end of the World War the Royal Air Force was composed of 20,122 officers, 260,410 men and 3,000 service airmen. Today it is composed of 2,072 officers, 27,400 airmen and 151 first line airmen, that is, including reserve and training airmen, a total personnel of 30,000 airmen. He further stated that the number of airmen in the two thirds of the British service squadrons are enormous. Of the 24 British service squadrons, 16 are in Egypt, the Mediterranean and the East West. There is a total of 2,000 men working at home and one to seven work at home, leaving only five aircraft squadrons in Great Britain for home defence. The remaining aircraft squadrons are in India.

The present strength of the French air force is 12,000 first line airmen, as stated, against 3,000 at the time of the Armistice, and three-fourths of the French airmen are in France. France now has 32 flying squadrons and a number of balloons and gliders. For the year 1933 the program for the French air force is a total of 2,000 airmen who will be added to the British government, even with the addition of the 200 additional regular squadrons recently authorized, will have but 315 service airmen.

Second French Gliding Meet

In August of this year the Association Française Aéronautique will hold its second "Expositionniste Congress of Materials for Gliders" at Vichy.

The results of the previous year's meeting have recently been published. Entries applications for information, etc., should be addressed to the Tiers, l'Association Française Aéronautique, 25 Boulevard des Batignolles (VII^e), Paris.

The meeting will be under the patronage of M. Léonard Ryba, President of the French Gliding Federation. The total cost and total sum of 30,000 francs will be available for prizes. The competition includes distance, height and duration contests, gliding in horizontal currents, etc., for both engines and auxiliary engine gliders.

British Entries for Schneider Cup

The only certain British entry for the Schneider Cup race is a modified version of the Gloster Gladiator, the Hispano-Suiza 12A. Another entry will almost certainly be built by the Supermarine Aviation Co., Ltd., and it is probable that the Gloucestershire "Hawker" will be entered in the race with four. There may also be a Fairey entry. All these machines will be fitted with Napier "Lion" 450 hp engines.

Plymouth to London Airway Service

In order to expedite the arrival of mails in London from boats touching at Plymouth, the London Air Line Co. has applied as an experiment, to run an air mail delivery from Plymouth each Friday for one month (Commercial Aircraft Welfare Fund, London).

"A number of the 8000 planes piled up in the British air bases are considered surplus to requirements and are available for sale. One hundred of the 8000 planes which the French Naval Air Service had to return to France for minor repair and in reserve, 1924, were the Fokker F.II. These were the first Fokker planes. It follows that the present air strength of France is about one-tenth of that which we are in, as the British air bases exceed 8000."

"If war were declared to-morrow what would we do for aircraft?"

The Surprise War Equipment Question

Following reports of aircraft accidents the Congressional Chamber of Commerce of America has made public the following telegram to the Secretaries of War and Navy referring concern of that organization in working out a plan to control the use of aircraft pending enactment of Federal laws to regulate the same.

"Washington, D. C., May 26.—The Congressional Chamber of Commerce has received reports of commercial aircraft we are not satisfied for reference regarding the attitude of the Department toward the sale of surplus equipment to civilians, with particular reference to condition in which machines are released and uses to which they are to be put. Requests are made that the Department take immediate action to prevent such interference with private business interests as may be created by unregulated competitive flying. We place at your disposal all resources of our organization in an effort to correct the situation pending enactment of federal law."

Aero Lloyd A. G.

The following additional information on the Aero Lloyd A. G., the big German airline line, is now on hand:

Stell. Manager D. von Steiner, in charge of the important Berlin office, Director of the Hamburg-American Line and Government Steamer of the North German Lloyd line, says:

The operations of the Aero Lloyd are said to be distinct from the Junkers Airlines, Gesellschaft, recently reported to be planning to enter aircraft transport.

The operations of the Aero Lloyd are understood to make between Copenhagen and Vienna and Moscow and Vladivostok new planned. Negotiations with France for a route between Berlin and Paris, in progress before the Reichstag election, have been dropped.

Elias Night Bomber

G. Elias & Son, Inc. of Buffalo, N. Y., were one of three companies invited to submit designs to the Army Air Service for Type III, Multi-engine, short distance night bombardment experimental airplane.

This is the fourth aircraft received by the Elias company in Army and Navy design competitions.

Air and the Dictionary

The American Chamber of Commerce has announced in the preparation of the airways and airship section of the 1933 Century Dictionary, American Encyclopedia and Book of Science, many photographs and captions illustrating American craft were employed in these sections.

Copenhagen-Hamburg Service

Passenger fares on the Copenhagen-Hamburg air bus week beginning April 25, and 15 francs (about \$3) are charged with 25 francs last year. Three Dornier medium seaplanes are employed on the route which is operated by a Danish company.

American Aircraft Exports

American aircraft exports in February, 1933, exceeded two airplanes (RAF 801), shipped to Salvador, one engine (RAF 800) to the Netherlands, and parts worth \$6,100 shipped to various countries.

ARMY AND NAVY AIR NEWS

U. S. Army Air Service

Army Gliders.—First Lt. Ernest W. Jones, A.S.A., now under treatment at St. Luke's Hospital, Leipzig, Field, Va., is recovering from a glider accident. He was flying a glider and at 600 ft. at the same time the second loaded flight made by the Army's biplane, C. 13, when a glider in Japan, trans. Illustrat. Picnic, L. L. S. Johnson, S. W., a distance of approximately 1100 miles.

Capt. Paul J. Mullin, A.S.A., granted three months leave upon relief from duty at Park Field.

First Lt. Russell C. MacEachern, A.S.A., from Brooks Field, Tex., to Maxwell Field, Ala., Capt. Paul J. Mullin, A.S.A., from Brooks Field, Tex., to Maxwell Field, Ala.

First Lt. Glenn C. Sabathay, and Arthur L. Thompson, A.S.A., from Brooks Field, Tex., to Corpus Christi Field, in connection with summer training camps.

First Lt. Charles P. Shultz, A.S.A., from Middleboro, A.I.D., to New York City as procurement planning representative of A.S.A. Corp.

Sec. Lt. Donald R. Bowley, A.S.A., from Middleboro A.I.D., to Detroit, Mich., as procurement planning representative of A.S.A. Corp.

Sec. Lt. John E. D. Tamm, A.S.A., from Brooks Field to Fort Riley, Kan.

Tech. Staff. Charles W. Stiles, Jr., from Telford Field, D. C., to Middleboro A.I.D. with 28th Bombardment Sq.

First Lt. Earl D. DeFord, A.S.A., relieved from War Transportation Board, to Kirtland Field.

First Lt. John M. Morrison, A.S.A., relieved from Brooks Field, Tex., to San Antonio A.I.D.

First Lt. Martin W. Holden, A.S.A., relieved from flying training at Brooks Field, Tex., to Fort Meade, Md.

First Lt. Thomas Brooks, A.S.A., assigned from Brooks to Satzfeld Field, Wash., to Maxwell Field, Ala., from Satzfeld Field, Fla., for summer or winter training.

First Lt. William Tappard, A.S.A., from Brooks Field, Tex., to Satzfeld Field, Fla., for winter or summer training.

The following named officers are assigned to Fort Leavenworth, Kan., to study at the University of Kansas, and Maj. William C. Sharpen, Capt. Charles Field, Maj. Herbert A. Dwyer, A.S.A., D.C.A.S., Washington, D. C., Maj. Maxwell Krieger, A.S.A., 9th Corps Area, Fort Hayes, Ohio, Maj. Henry C. Maiburg, assistant professor in military science and tactics, University of Kansas, Lawrence, Wash.

First Lt. Walter E. Zollman, A.S.A., relieved from training at Brooks Field, Tex., to Brooks Field for duty.

Sabine Pilots at Brooks Field.—Students undergoing primary flying training at Brooks Field, San Antonio, Tex., have just completed their work on liberty stations and 2nd Lt. D. W. Winkfield, instructor in aviation, has located in the final examinations. The students, who were undergoing ratings and evaluations of their ability, will be given a written examination. The remainder of the class, who were undergoing ratings and evaluations of their ability, will be given a written examination. The class will be given the results of the examinations on May 30, 1933.

He also states that the first class of the C.I. in its fundamental trip on the 1st of May, 1933, Lieutenant Stevens, Adjutant of Brooks Field, took command of the ship upon its arrival at its new station, Lieutenant Head is in charge of the supply depot at Satzfeld Field, and Captain Felt is in command of the Flying Training School. Lieutenant Head and Adjutant Felt of the C.I. during the initial experimental flights.

Landing Field at Abilene, Tex.—Abilene, Tex., was officially placed on the map the latter part of March when Lieutenant Rice and Major of the 41st School Squadron, Kelly Field, made the first landing in the history of the town. The pilots were welcomed by the entire community, including Mayor, from whom a special reception was given.

The field was cleared and graded, and a landing "D" established and the High School yard raised to nearly the word elevation. The pilots returned to Kelly Field in slightly over six hours' flying. Their return from the town to San Antonio is believed seven and eight hours time.

"If war were declared to-morrow what would we do for aircraft?"

An Escaping Free Balloon Trap—Maj. John D. Weston and Maj. Barth B. Lincoln, two Air Service Officers, students at the School of the Air, at Fort Leavenworth, Kan., left Boston, May 11, 1933, in a 1932 Ford V-8 sedan to make a nonstop free balloon flight. They returned, April 14, after a bending flight to Flores, Fla., a distance of 320 miles from Fort Meade. In trying to land, both officers were thrown out of the basket and the basket devolved.

According to their report, in Major Weston and Lincoln's 1932 Ford V-8 sedan, they descended at 3300 feet with a small sand bagging. Riding in an altitude of 1600 ft. their balloon twisted at a high rate of speed toward the earth. They passed over Springfield at 6:10 p. m., Mass., during evening, but did not descend. At 1800 ft., they were passing Springfield, and descended to 1500 ft. and then rose again. Flying along the ground, they were about 1000 ft. above ground level. They came down shortly after dark. The balloon twisted and the seat at a height of 1200 ft. m. Swung a circle to make a landing, the arms used as effort to descend, but held up past, and the cord which operated the gas valve failed to operate. The balloon twisted up and continued on flight until it was in danger of crashing into trees. They then made a series of short turns of the gas bag and used it for landing. In this way, with the balloon down to a comparatively low altitude, approaching the Fox River, a short distance west of Chicago, they were able to land safely. In the same manner Lincoln was the master of the basket.

The balloon drifted away, going where pleased, of its own accord and was later caught at Flores, near Washington, Fla., 35 miles north of Tampa, Florida, morning. In some ways, however, the men had no control over the basket except by releasing the gas bag, which had been tied to the basket. Both the bag and the basket were not necessarily damaged and so they escaped. They had to walk 10 miles to a telephone town, Flores.

Major Weston and Lincoln returned to Scott Field by rail and had shouldered their bags before Lincoln, Major Lincoln, who had been flying for the first time in his life, was allowed to return to the plane, which had been tied out of the basket. Both the bag and the basket were not necessarily damaged and so they escaped back to Scott Field.

Officers Quarantine at Brooks Field—An officer corps of 5000 has been removed at Brooks Field, San Antonio, Tex., to be isolated from Brooks Field, San Antonio, Tex., to be isolated for the duration of the air raid warning. This was originally intended, and will greatly reduce the chance of infection among the members of the field. A slight increase in the aftermath for the care and enforcement of grounds was also measured, and will be put to use module six.

New Designations of Flying Tracts—The following new designations of flying fields are recommended by the War Department:

The flying field at Columbus, Ohio, is named "Moran Field" in honor of First Lt. Fred W. Moran, A.S., who died July 22, 1932, at altitude received an altitude while in memo combat north of Flores, Flores, on July 22, 1932.

The flying field at Lakewood, Colo., is designated "Lakewood Field" in honor of Capt. George G. Marshall, Co., who lost his life in December, 1932, while in flight between San Diego, Calif., and Nogales, Ariz.

Torles Aeroplane from Field-Brooks Field has received part of a new Bodine motor, which will be 200 hp. long. The Bodine will be put into service at Belvoir in the near future.

Qualified Reserve and National Guard in Boston—The 33rd Obs Sq., 54th Div., Org. Regt., and the 81st Obs Sq., Boston, Natl. Guard, had a very successful joint dinner in Boston, May 11, 1933, to honor the 10th anniversary of the formation of the regular service on duty at the Massachusetts Institute of Technology, and guests, James T. Williams, Jr., editor of the Boston Transcript, presided.

Maj. Richardson, commanding the Second Battalion, and Maj. Frank Wherry, commanding the 33rd Observers, addressed the assembly, pointing out the history of the Reserve organizations and briefly outlined the past activities of the men and plans for the future. Colonel Doyle, Acting Chief of Staff of the 33rd Division, described the formation of the division, and the part played by the Air Service in connection with the First W. W. War, the Mexican Revolution, and the Pan American Conference on the proposed national air legislation, and Maj. L. H. Bourne, A.M., Chief of the Personnel Division, Office of the Chief of Air Service, who had come on from Washington for the occasion, told of the recent and active war reserve activities. The speaking was brought to a close by Col. E. C. Young, Capt. Charles F. Tamm, Capt. of the 33rd Obs Sq., and Capt. C. C. Clegg, Capt. of the 81st Obs Sq., the two colonels of training reserve Air Service officers at Mitchel Field during the ensuing summer. A great deal of interest was shown in all present, and several such detailed questions were cleared up.

Airman Starts an Unprecision Trap—An unprecision trap was made in the approach of Fort Boston, now in process of construction. In Major Donnan, Major Frost, Capt. Louis A. R., Major Whaley of the Mass. National Guard, and Major Richardson of the Marine Reserves. After penetrating the intense envelope passing all new fire fields, the officers found the wide precision trap. The trap was set with a series of 1000' drops with concrete blocks, for some, and reserves, we are uncertainly completed while the foundations for the National Guard barracks are finished and awaiting the arrival of dragoons. One of the two 5000-hp. motors is partially ruined, and it would be possible to land a ship in some part of the field before a major works have passed.

Air Service Unit Cooperates with Navy—In the recent maneuvers with the Antisubmarine Squadron of the Atlantic Fleet in the Cuban Sea, the crew const of Lt. Comdr. Fletcher, R. M. and Lt. Comdr. Spangler, Comdr. of the submarine division, observed the destroyers with the fleet.

Each day the destroyers fired a series of four torpedoes at short intervals at a moving target at a range of 15,000 yds. Actual observation was used as aid to the accuracy of those torpedoes which failed to follow a direct course due to the influence of the wind and current. The gunners tracked the targets and reported by radio the progress of those which failed to follow a true course. Smoke screens were dropped on the surface to mark the positions of the torpedoes which sank.

Excellent two-way radio communication was maintained with the surface flagship, "Avery" and Navy Commandant Prendergast" being used. Acknowledgment was made by the commander of the destroyer squadron that the assistance rendered by the Air Service was instrumental in the recovery of a number of torpedoes.

Cold Weather in Southern California—While the inhabitants of North Island, San Diego, Calif., and vicinity, were building in the sun-baked mountains of Southern California, Lt. Comdr. Frank W. Setser, A.S., went ashore with Capt. W. O. Gruen, Marine Corps, and Capt. W. H. Ladd, Marine Corps, to conduct radio tests in the high altitude radiation belt region above the 4000-foot level. Lieutenant Setser started an altitude of 15,000 ft. and at that height experienced real cold weather, causing his thermometer to become coated with ice, which was much an evidence when he landed at Lakewood Field after his two hours and fifteen minute flight. Lieutenant Setser and Mr. Otto expect to continue their observations for a day until data is obtained from the 9,000, 12,000, 15,000, 18,000 and 20,000 ft. levels.

"If war were declared to-morrow what would we do for aircraft?"

U. S. Naval Aviation

The Loss of the PTs—Orders were issued by the Bureau of Aeronautics concerning the loss of all PT torpedo planes to the Naval Aircraft Factory upon the return of the Torpedo Plane Division to Hampton Roads, Va., the morning of May 11, 1933. The planes had been used within the month by the new PT torpedo plane which has shown marked remarkable performance and high merit.

The passing of the PTs will cause little regret among the seaplane pilots who have been looking forward with impatience to the arrival of the new ships. However, the PT has been a valuable development type, and will have been supplemented by its replaceable parts. The new plane may be the way to a wider field of usefulness for the advanced design.

Comd. H. C. Richardson, Test of Airships in England—At a meeting of officers of the Bureau of Aeronautics last Tuesday Commander H. C. Richardson gave an account of his recent visit to England. He said that Commander Richardson has recently returned from London where he attended the meetings of the AIRSHIP CONFERENCE. The Conference was held to derive ways and means for interesting capital in commercial aviation.

In speaking of a visit to Crayton, the air base in England, for restorations, air bags, Comdr. Richardson said that the airship could not be repaired there. A radio airship consists of an open莽ionized envelope with plates in flight through the atmosphere, absorbing their movements and supplying them with information of weather conditions. He spoke of sending five plates from the nearest land at Crayton in a driving rain that prevent him from doing so. He suggested getting a place near the hangars, and who informed that passengers of rigid airships were conducted without incident.

This Freedom of the Air—When firmly and enterprise flying covers in all fields, cities and individuals to be held in a field meet and compete in air shows for landing aircraft planes. It may be taken as good proof that aviation has arrived.

On his way from Washington, N. Y., last week, Lt. Col. H. J. Nease, U. S. A.C., and companion to land for Seattle, Pa., on a point of land, where he had to make a landing. He had to make a full stop when the wind increased 40-50 mph, and began to fly despite intense rain as to prevent ground rules, etc. He was finally required to accept a written acknowledgement of his claim, and was given a certificate to prove his claim.

Another record flight was made by Capt. Nease, who was of a French Airship, on a small clearing about one of the Alphey mountains. It was caused by the engine overheating and the conveniently located mountain top was a welcome spot in rough country.

Radio Spark Transmitter to be Disseminated—Spark transmitters with the exception of those in use at Pensacola for training will be discarded and will be replaced by the new take off according to a decision in the radio division of the Bureau of Navigation.

Five of the new radio spotting sets manufactured by the Western Improvement Co. have passed satisfactory tests and are being shipped to the Air Squadrons, Brooks Field. These sets will replace the SE 1345's now in use there. When the latter are retired they will be issued to other stations to replace the SE 1300 spark sets.

Aviation Mechanics' School, Great Lakes, Ill.—An 180 aircraft which was in storage at Great Lakes has been completely overhauled, streamlined and given flight tests. This plane is now being demonstrated and tested for shipment for use with the 35th Battalions 11th N.R.F. at New York City.

"If war were declared to-morrow what would we do for aircraft?"

New Orders Issued April 27 to April 28—Lt. George D. Thompson (M.C.) U.S.N.—Detached School of Aviation Medicine, Mitchel Field, Mineola, L. I., N. Y.; to Observation Squadron One, 3rd Brigade, 3d Marines, Santa Domingo, Dominican Republic; U. S. Navy—Detached Naval Medical Personnel, Pima, Ariz., to Treatment Naval Hospital, Washington, D. C.

Lt. Cmdr. B. Sharpe, (OC) U.S.S. "Detached Bureau of Aeronautics, Navy Dept., to Naval Aircraft Factory, Navy Yard, Philadelphia, Pa.

Ensign H. M. Martin, U.S.N.—Detached U.S. Wright, Motor Air Service, Pensacola, Fla., to U.S.S. "Chevalier."

Lt. Comdr. John L. Farmer (M.C.) U.S.A.—Detached School of Aviation, Mitchel Field, Mineola, L. I., N. Y.; to Commanding Officer, 1st Brigade, 3d Guards, U. S. Marines, Camp Bonner, San Diego, Calif., to Naval Station Guadalupe.

Ensign George D. Thompson (M.C.) U.S.N.—Detached School of Aviation Medicine, Mitchel Field, Mineola, L. I., N. Y., to U.S.S. Langley.

Solarium Plane Wins Further Trophy—The sunburn plane which has been under construction at the Glenn L. Martin plant in Cleveland for the Navy has had additional test flights during the past week by the test pilot of the Martin Co. and by Lieutenant Paul and Strong of the Navy. It is expected that the top plane, the smallest seaplane in the world, will soon be brought to Anacostia for further trials.

The plane is 10 ft. long and 10 ft. wide, with a wing span of 10 ft. and a weight in flying of 170 lbs. It is powered by a 25-hp. Lawrence engine. Fully loaded the weight is 1000 lbs. Assembled and ready for flight, it could be placed in an average living room with plenty of space to spare.

Canadian Air Movie View Shows—On April 25 the Chief of Bases received word from the Canadian Air Research Board that Capt. G. E. C. D. Tamm, R.C.A.F., had been appointed Canadian Naval Air Attaché and composed of navalists who serve in an advisory capacity to the Canadian Government as regards air policy. During their stay in Washington the members of the commission visited the wind tunnel, and the aero engine laboratory at the Washington Navy Yard.

Coming Aerostatic Events

AMERICAN

May 16—Pilot Armed Aircraft Exhibition, Phoenix, Ariz.—Pilot of Sabotage, Legion Field, Decatur, Md.

July 4—National Helium Race, Indianapolis, Ind.

Oct. 13—National Airplane Races, St. Louis, Mo.

June Fall—Gulf Coast Marine Flying Trophy Race.

FOREIGN

June 15-20—International Aero Exhibition, London.

July 10—International Auto Show, Copenhagen.

Aug. 12—Berlin.

Aug. 13—Salzburg Motor Races, Salzburg, Germany.

Aug. 13—Salzburg Motor Races, Passau, near Garmisch, Germany.

Sept. 11—Gulf Coast Marine Flying Trophy Race.

Sept. 12—Belgian Marine Aviation Trophy Race, Brussels, Belgium.

Sept. 12—Belgian Marine Aviation Trophy Race, Coors, 16th of Sept., England.

Sept. 13—Racing class for French Engine competition.

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